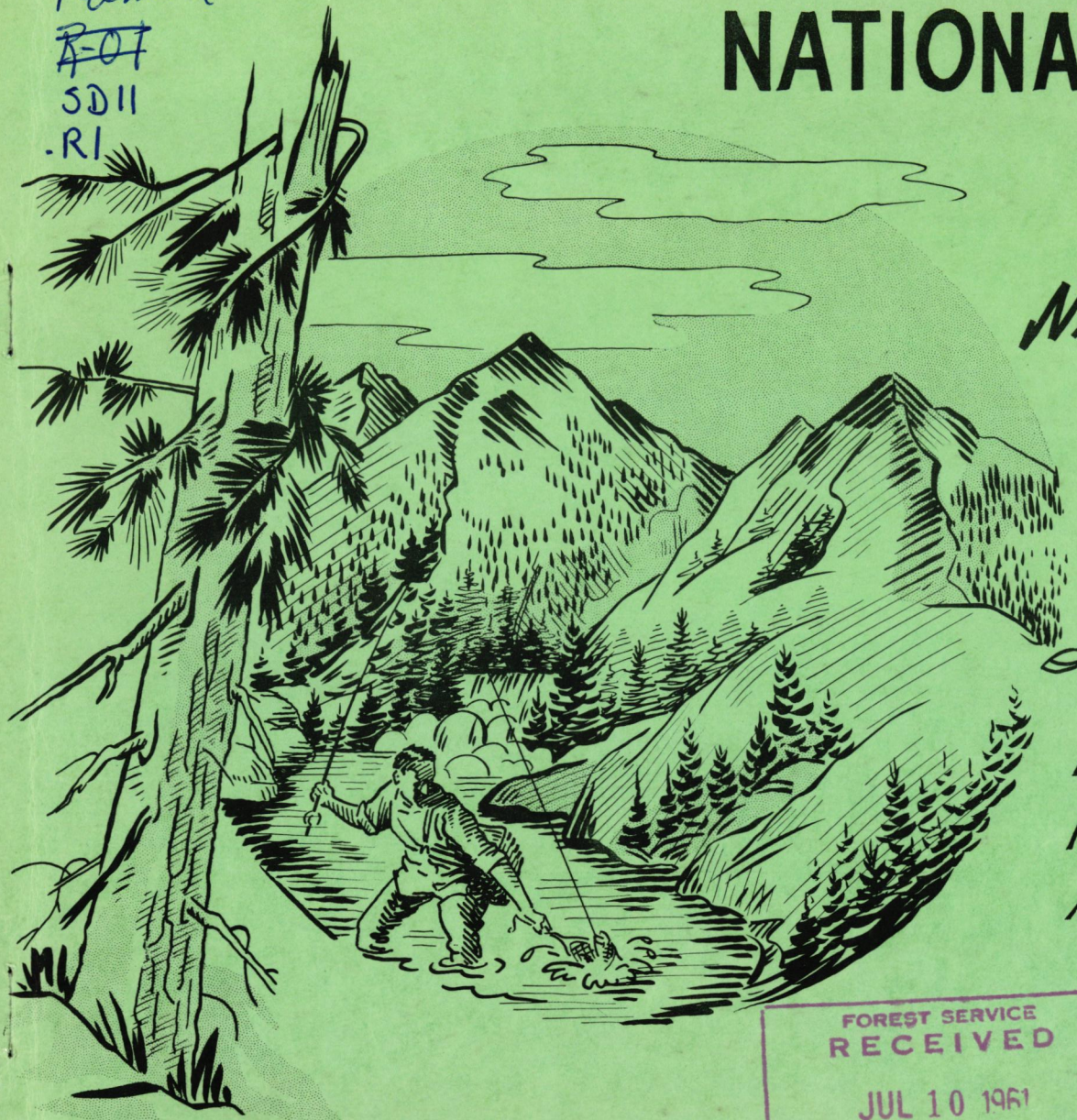
Powell
R-01
SD11
.R1

I 90 4029

NATIONAL FOREST FACTS

Including NATIONAL GRASSLANDS



Northern Region

MONTANA, N. E. WASHINGTON
N. IDAHO, N. W. SOUTH DAKOTA
And WESTERN NORTH DAKOTA

FOREST SERVICE
RECEIVED
JUL 10 1961
RESEARCH
INTERMOUNTAIN

WOOD · WATER · FORAGE · WILDLIFE · RECREATION
FOREST SERVICE U S DEPARTMENT OF AGRICULTURE

REGIONAL FORESTER
MISSOULA-MONTANA

REVISED 1961

SD11
.R1

PREFACE

NATIONAL FOREST FACTS has been prepared primarily for use of Forest Service people and friends of the Forest Service who in their contacts with the public may have need for facts and figures concerning the organization, activities, resources, incomes, and expenditures within the Northern Region.

Since 1954, the Northern Region of the U.S. Forest Service has been managing nearly 1,200,000 acres of former Bankhead-Jones Title III lands in North Dakota and South Dakota. On June 20, 1960, these lands were renamed "National Grasslands" and were designated a part of the national-forest system, thus providing for their permanent management. Personnel of the Custer National Forest administer these lands.

Those who use this publication are encouraged to submit ideas and suggestions for improving its usefulness to the Division of Information and Education, Regional Office, Missoula.

CONTENTS

	Page
NATIONAL FOREST LANDS	
Operation	1
Timber Management	2
Range & Wildlife Management	3
Recreation, Lands & Watershed Management	4 - 9
State & Private Forestry	10 - 13
Engineering	14
Fire Control	15 - 16
Fiscal Control	17 - 18
RESEARCH	19
NATIONAL GRASSLANDS	20 - 22
Area Statistics	20
Recreation and Lands - Special-Use Permits	21
Range and Wildlife Management	22

OPERATION

ACREAGES BY FORESTS, FISCAL YEAR 1961

	Montana	Northeast Washington	North Idaho	Western North Dakota	Northwest South Dakota	Region
Number of forests	10	1	5			16
Number of ranger districts	66	6	29			101
National Grasslands				2	1	3
National forest acres	16,635,645	1,216,016	6,865,733		73,707	24,791,101
Other (State, private, etc.)	2,418,583	87,802	602,490		4,119	3,112.994
National Grasslands				1,036,525	155,426	1,191,951
Gross acreage	19,054,228	1,303,818	7,468,223	1,036,525	233,252	29,096,046

Forests	Headquarters	Net national forest acreage and number ( ) ranger districts					
Beaverhead	Dillon, Montana	2,131,136 (8)					2,131,136 (8)
Bitterroot	Hamilton, Montana	1,113,814 (4)		460,812 (1)			1,574,626 (5)
Clearwater	Orofino, Idaho			1,250,762 (5)			1,250,762 (5)
Coeur d'Alene	Coeur d'Alene, Idaho			723,235 (4)			723,235 (4)
Colville	Colville, Washington		928,332 (5)				928,332 (5)
Custer	Billings, Montana	1,097,784 (5)				73,707	1,171,491 (5)
Deerlodge	Butte, Montana	1,134,577 (5)					1,134,577 (5)
Flathead	Kalispell, Montana	2,336,378 (8)					2,336,378 (8)
Gallatin	Bozeman, Montana	1,700,139 (7)					1,700,139 (7)
Helena	Helena, Montana	966,613 (4)					966,613 (4)
Kaniksu	Sandpoint, Idaho	447,147 (2)	287,684 (1)	891,348 (5)			1,626,179 (8)
Kootenai	Libby, Montana	1,769,404 (7)		48,851			1,818,255 (7)
Lewis & Clark	Great Falls, Montana	1,862,012 (7)					1,862,012 (7)
Lolo	Missoula, Montana	2,076,641 (9)		426,062 (1)			3 2,502,703 (10)
Nezperce	Grangeville, Idaho			2,196,019 (8)			2,196,019 (8)
St. Joe	St. Maries, Idaho			868,644 (5)			868,644 (5)
National Grasslands					1,036,525	155,426	1,191,951

TIMBER MANAGEMENT

TIMBER STAND AND SALES ACTIVITIES, FISCAL YEAR 1960

Commercial timber area available for management	Montana	Northeast Washington	North Idaho	Northwest South Dakota	Western North Dakota	Region
Sawtimber - thousand acres	5,037.5	593.1	2,062.2	0.5	-	7,693.3
Poles - thousand acres	4,336.3	187.4	1,147.4	6.7	-	5,677.8
Seedlings and saplings - thousand acres	891.2	260.9	798.1	0.2	-	1,950.4
Restocking - thousand acres	281.3	34.4	566.7	4.3	-	886.7
Total acres	10,546.3	1,075.8	4,574.4	11.7	-	16,208.2
Total volume, sawtimber, billion board feet (Scribner)	49.8	6.4	31.6	-	-	87.8
Timber cut, all products, million board feet (Scribner)	480.0	86.2	495.0	-	-	1,061.2
Timber sold, million board feet	663.5	94.9	464.3	-	-	1,222.7
Number of convertible sales awarded	1,497	207	674	2	30	2,410
Number of above sales over $2,000	174	32	117	-	-	323
Collections for stumpage						$9,959,677
Collections for slash treatment						$1,877,260
Collections for sale area betterment						$1,860,204
Total timber use collections						$13,697,141
Total acreage planted to date	49,229	21,901	103,348			174,478
Direct seeding in addition to planting totals shown above	2,803	0	1,406			4,209

RANGE & WILDLIFE MANAGEMENT, CALENDAR YEAR 1960

Range management, 1960	Montana	Northeast Washington	North Idaho	Northwest South Dakota	Region
			Range also used by game		
Range open to livestock, acres	4,488,168	353,170	1,106,195	73,688	6,021,221
Cattle, permitted, number	117,328	6,407	14,382	3,577	141,694
Paid permits, number	1,683	166	336	38	2,223
Sheep, permitted, number	175,155	3,085	14,398	186	192,824
Paid permits, number	110	3	14	1	128
Total paid permits, number	1,793	169	350	39	2,351

Wildlife management, 1960						
Fish streams, miles			4,552	382	3,915	0	8,849
Fish lakes, acres			80,984	2,716	118,869	0	202,569
Range open to game, acres			17,089,083	1,216,021	5,623,961	80,000	24,009,065
Range, game only, acres			11,462,425	837,794	5,487,832	2,943	17,790,994
Big game:	Mule deer	Harvest	4,320	1,680	2,265	600	44,865
	White-tailed deer	Harvest	9,495	3,325	3,850	150	16,820
	Antelope	Harvest	665	0	0	80	745
	Elk	Harvest	8,960	11	7,010	0	15,981
	Moose	Harvest	490	0	38	0	528
	Bear, grizzly	Harvest	46	0	0	0	46
	Bear, black	Harvest	1,102	200	705	0	2,007
	Mountain goat	Harvest	414	0	51	0	465
	Mountain sheep	Harvest	85	0	18	0	103
Big game hunters, visits			375,370	31,100	113,135	3,200	522,805
Small game and bird hunters, visits			83,525	6,500	27,565	300	117,890
Fishermen, visits			683,375	44,700	201,275	75	929,425

Note: Population estimates for big game discontinued.

RECREATION, LANDS & WATERSHED MANAGEMENT, FISCAL YEAR 1960

Developed areas	Montana	Northeast Washington	North Idaho	Northwest South Dakota	Region		
Camp and picnic	166	15	58	3	242		
Number family units	1,450	142	482	15	2,089		
Capacity	7,250	700	2,400	75	10,425		
Winter sports	11	1	2	-	14		
Organization camps	29	2	5	-	36		
Special-use permits (as of 6/30/59)					Number	Acres	Miles
Agricultural and cultivation	75	8	12	3	98	1,105	
Cabins	86	6	38	-	130	2,974	
Drift fences	140	1	20	6	167	1	144
Organization sites	29	2	5	-	36	370	
Radio, television, antenna site	45	2	23	-	70	191	14
Residences	914	30	219	-	1,163	861	
Resorts	38	1	8	-	47	649	
Sawmills	18	2	5	-	25	217	
Schools	15	-	6	-	21	39	
Telephone and telegraph lines	74	3	21	3	101		342
Power plants and lines	176	25	77	2	280	285	768
Reservoirs	116	2	12	-	130	6,404	
Water supply	20	14	2	-	36	14	2
Water transmission lines	357	22	64	5	448	2	288
Winter sports	11	1	2	-	14	2,762	1
Miscellaneous	1,124	108	436	12	1,680	704,180	1,200
Total special-use permits	3,238	227	950	31	4,446	720,054	2,759
Federal Power Commission permits							
Power plants, reservoirs, and transmission lines	37	2	13	-	52	17,669	136
Department of Interior (BLM) permits							
Oil and gas leases, railroads, reservoirs, transmission lines	601	-	7	34	642	941,309	46

Wild and wilderness areas	Forests	Area (acres) Gross	Net
Absaroka	Gallatin	64,000	64,000
Anaconda-Pintlar	(Beaverhead (Bitterroot (Deerlodge	145,000	144,940
Spanish Peaks	Gallatin	50,000	49,800
Beartooth	(Custer (Gallatin	230,000	230,000
Gates of the Mountains	Helena	28,562	28,562
Cabinet Mountains	(Kaniksu (Kootenai	90,000	89,900
Bob Marshall (Flathead Sun River)	(Flathead (Lewis & Clark	950,000	950,000
Mission Mountains	Flathead	75,500	73,340
Selway-Bitterroot	(Bitterroot (Lolo (Nezperce (Clearwater	1,875,306	1,869,356
Scenic Areas			
Ross Creek	Kootenai	100	100
Roosevelt Grove of Ancient Cedars	Kaniksu	420	420
Historical Areas			
Sacajawea	Beaverhead	84	84
Geological Areas			
Madison River Canyon	Gallatin	37,800	36,415

Natural areas	Forests		Montana	North Idaho	Region
Tepee Creek	Kaniksu	Western white pine		746	746
Cliff Lake Bench	Beaverhead	Grassland, aspen, Douglas-fir, and lodgepole pine	2,301		2,301
Canyon Creek - in Priest River Experimental Forest	Kaniksu	Western white pine, western red cedar, hemlock, alpine fir		1,034	1,034
Coram - in Coram Experimental Forest	Flathead	Western larch, Douglas-fir	811		811
Montford - in Deception Creek Experimental Forest	Coeur d'Alene	Western white pine		335	335
Total			3,112	2,115	5,227
Experimental forest (INT)					
Deception Creek	Coeur d'Alene	White pine		3,500	3,500
Priest River	Kaniksu	White pine		6,400	6,400
Coram	Flathead	Larch--Douglas-fir	7,328		7,328
Bernice (inactive)	Deerlodge	Lodgepole pine	2,909		2,909
Total			10,237	9,900	20,137
Experimental ranges (INT)					
Vigilante	Beaverhead		8,500		8,500

RECREATION, LANDS & WATERSHED MANAGEMENT, FISCAL YEAR 1960--Continued

Acquisition	Montana	Washington	North Idaho	Northwest South Dakota	Region
Exchange - acres acquired	740,887	87,526	314,770	2,290	1,145,473
Donation - acres acquired	3,219	5,012	299,304		307,535
Purchase - acres acquired	Activity so far limited to small acreages purchased for administrative sites				
Total	744,106	92,538	614,074	2,290	1,453,008
National forest ceded in exchange	226,170	1,627	8,790	3,877	240,464
Total acquired, net (acres)	517,936	90,911	605,284	-1,587	1,212,544
Homesteads patented to date	3,049	42	735		3,826
Acreage	383,472	4,022	67,548		455,042
Mining claims patented to date	5,136	45	1,583		6,764
Acreage	116,951	873	36,893		154,717
Applications for patent pending (claims)	7	1	76		84
Acreage	224	20	1,313		1,557
Recreation visits (calendar year 1960)					
Campgrounds	352,400	25,300	71,700	600	450,000
Picnic areas	447,600	29,300	62,900	4,500	544,300
Subtotals	800,000	54,600	134,600	5,100	944,300
Winter sports areas	158,900	4,600	21,200		184,700
Organization camps	19,900	500	2,600		23,000
Hotels and resorts	41,200	500	11,400		53,100
Summer homes	62,700	3,100	15,500		81,300
Wilderness areas	26,700		11,100		37,800
Other forest areas	3,538,600	112,500	548,400	6,300	4,205,800
Total	4,648,000	175,800	744,800	11,400	5,580,000

WATERSHED AND STREAMFLOW

	Columbia	Missouri
Acres of national forest in basin (estimated)	16,711,000	7,946,000
Water produced by national forest in acre feet (estimated)	25,000,000	11,000,000
Peak flow of record at Fort Benton, June 7, 1908 (second feet)		140,000
Peak flow of record at Metaline Falls, June 16, 1913 (second feet)	139,000	
Peak flow of record at Port Hill, June 19, 1933 (second feet)	93,200	
Minimum flow of record at Fort Benton, July 5, 1936 (second feet)		320
Minimum flow of record at Metaline Falls (second feet)	2,500	
Minimum flow of record at Port Hill, February 8, 1926 (second feet)	13,380	
Number of snow courses measured by rangers	32	4

PROGRESS OF FIELD EXAMINATIONS
PUBLIC LAW 167 -- ACT OF JULY 23, 1955

	Areas	Acres
Surface rights determination completed	64	6,191,064
Surface rights determination in progress	70	9,471,372
Total	134	15,662,436

DISPOSITION OF VERIFIED STATEMENTS FILED UNDER PUBLIC LAW 167, ACT OF JULY 23, 1955

	Statements	Claims
Verified statements filed	378	2,867
Verified statements rejected by BLM	62	523
Verified statements scheduled for mineral examination	316	2,344
Verified statements withdrawn by stipulation	191	1,498
Verified statements pending mineral examination	26	299
Verified statement claims reported valid	43	212
Verified statement claims reported not valid	56	335
Verified statement claims withdrawn prehearing	21	132
Verified statements hearing pending	12	118
Verified statements hearing completed	16	65
Verified statements rejected by administrative decision	7	20
Verified statements to be administered under Sec. 4, P.L. 167 (Act of July 23, 1955)	293	2,200
Verified statements asserted rights recognized	43	212

STATE & PRIVATE FORESTRY, FISCAL YEAR 1960

COOPERATIVE FOREST FIRE PROTECTION CLARKE McNARY, SECTION 2, PROGRAM

PROTECTION AREA	MONTANA	NORTHEAST WASHINGTON	NORTH IDAHO	NORTHWEST SOUTH DAKOTA	REGION
STATE AND PRIVATE LANDS NEEDING PROTECTION - ACRES (FOREST LAND)	6,915,000	1,958,000	2,947,154		11,820,154
PROTECTED BY STATE	1,529,201	1,493,298	1,024,421		4,046,920
PROTECTED BY ASSOCIATIONS	2,520,732	464,702	855,677		3,376,409
PROTECTED BY FEDERAL AGENCIES	2,865,067		1,067,056		4,396,825
TOTAL ACRES PROTECTED	6,915,000	1,958,000	2,947,154		11,820,154
WATERSHED LAND PROTECTED	1,042,000				1,042,000
PROGRAM COSTS					
ESTIMATED PROTECTION COSTS (5-YEAR PERIOD 1957-62)	$746,781	PROGRAM REPORTS BY REGION 6	$976,394 (NORTH IDAHO) 1,174,973 (ENTIRE STATE)		$1,921,754
ACTUAL EXPENDITURES					
BY STATES	100,215		262,339		362,554
BY ASSOCIATIONS	151,078		104,441		255,519
C-M 2 APPROPRIATIONS ADMINISTERED BY FOREST SERVICE	81,500		131,200		212,700
TOTAL	$332,793		$497,980		$830,773
FIRE RECORD - 5-YEAR AVERAGE					
ANNUAL NUMBER STATE AND PRIVATE FIRES	288	Do.	353		641
ANNUAL ACREAGE BURNED - FOREST LAND	806		34,714		35,520

COOPERATORS PARTICIPATING IN C-M 2 PROGRAM - PROTECTIVE ASSOCIATIONS

MONTANA		NORTHEAST WASHINGTON	NORTH IDAHO		NORTHWEST SOUTH DAKOTA	REGION	
NAME AND LOCATION	ACREAGE		NAME AND LOCATION	ACREAGE		NUMBER ASSOCIATIONS	TOTAL ACREAGE
BLACKFOOT, MISSOULA	1,170,910		CLEARWATER, OROFINO	356,377		2	1,527,287
NORTHERN MONTANA, KALISPELL	1,152,600		POTLATCH, OROFINO	288,129		2	1,440,729
ANACONDA FIRE, ANACONDA	197,222		PRIEST LAKE, COOLIN	211,171		2	408,393
			PINE CREEK, KELLOGG	AREA PROTECTED BY FEDERAL AGENCY		1	
			PEND OREILLE, SANDPOINT	AREA PROTECTED BY STATE		1	
						—	
TOTAL ACREAGE	2,520,732			855,677		8	3,376,409

STATE & PRIVATE FORESTRY, FISCAL YEAR 1960--Continued

Cooperative tree planting program	Montana	Idaho	Northwest South Dakota	Region
Areas of state and private-owned lands needing planting				
Forest land (estimated) acres	164,000	200,000		364,000
Windbreaks and shelterbelts (estimated) acres	50,000	5,000		55,000
Number nurseries and location	Missoula	Moscow		2
Clarke-McNary, section 4, program				
Number trees produced and distributed	1,183,000	688,000		1,871,000
Annual cost, production and distribution	$51,762	$29,581		$81,343
Amount paid by Government under C-M 4	$5,600	$5,600		$11,200
Conservation reserve program				
Number trees in production	300,000 M	630,000 M		930,000
Expenditures for tree production	$6,319	$10,337		$16,656
Cooperative forest management program (CFM)				
Number of projects needed	10	7		17
Number of projects approved	4	5		9
Number and location of currently operating projects (January 1961)	Kalispell Missoula Bozeman Thompson Falls	Sandpoint Orofino SW Idaho SE Idaho		
Annual expenditures - Federal	$14,122	$6,750		$20,872
State	$27,905	$9,800		$37,705
Total	$42,027	$16,550		$58,577

Leading Cooperating Fire Prevention Organizations

Montana	Northeast Washington	North Idaho
Rural Firefighters Service	Keep Washington Green	Junior Chamber of Commerce
Keep Montana Green		Keep Idaho Green

Nationwide Cooperative Forest Fire Program (Smokey Bear). This is a national program sponsored cooperatively by Forest Service and the state foresters who contributed $150,000 from their C-M 2 allotments in fiscal year 1958. Forest Service contribution about matches that of the states.

STATE & PRIVATE FORESTRY, FISCAL YEAR 1960--Continued

RURAL FIREFIGHTERS SERVICE

Fire equipment available for use	Montana Rural Firefighters Service	*Northeast Washington organized county units	*North Idaho organized county units	Northwest South Dakota	Region
Number tankers with pumps	210	20	50		280
Number trailers with water and tools, and part with pumps	50	--	10		60
Number organized fire suppression volunteer crews, each with fire chief in charge with 3-12 men per crew	1,350	400	200		1,950
Equipment (small tools and backpack pumps) on hand to equip	7,100 men	200 men	5,000 men		12,300 men
Counties having one or more crews with equipment	56	4	4		64
Approximate value of equipment owned by counties and districts (exclusive of that bought from volunteer collections)	$400,000	$150,000	$50,000		$600,000
Appropriated money spent by counties and districts (1960)	$90,000	$50,000	$30,000		$170,000
Number districts organized under the 1947 fire district law	103				103

54 Montana counties are organized under Chapter 173, Laws of Montana 1945, Section 1, which law authorizes county commissioners to appropriate $5,000.00 annually for the purchase of fire equipment to be used for the protection from fire of farm range and forest lands not protected by any other fire control agency.

*Northeast Washington and North Idaho are organized fire districts in which the taxpayers voluntarily maintain the organization through taxation. They are set up primarily for structural improvement fire suppression but do handle other fires along and near roads, highways, grain field fires, etc.

BLISTER RUST CONTROL PROGRAM

Ownership in blister rust control area	National forest acres	National park acres	Public domain acres	State acres	Private acres	Total acres
National forest program	1,654,990	--	32,020	23,100	67,580	1,777,690
National park program	--	54,200	--	--	--	54,200
State and private program	14,430	--	3,830	210,500	491,780	720,540
Totals	1,669,420	54,200	35,850	233,600	559,360	2,552,430

			Worked areas		
Summary of control status	Total acres	Unworked acres	Needing rework	On maintenance	Acres treated with antibiotics
National forest program	1,777,690	1,151,610	290,530	335,550	51,430
National park program	54,200	5,410	12,350	36,440	2,360
State and private program	720,540	575,560	74,350	70,630	8,430
Totals	2,552,430	1,732,580	377,230	442,620	62,220

Expenditures	National forest program	National parks program	State and private program
Federal appropriation	$1,318,400	$142,100	$111,500
K-V	90,600	--	--
State appropriation	--	--	67,500
Timber protective associations	--	--	25,500
Totals	$1,409,000	$142,100	$204,500

SECTION OF FOREST INSECT AND DISEASE OTHER THAN BRC

Insect control program - area or volume attacked				
Insect	Acreage	Volume	Volume salvaged*	Area sprayed
Spruce budworm	3,000,000	--	--	118,000
Spruce bark beetle	--	35 MM est.	21 MM	--

*Infested volume on national forest land (nonreserved).

ENGINEERING, FISCAL YEAR 1960

Road miles	Montana	Northeast Washington	North Idaho	Northwest South Dakota	Western North Dakota	Region
Forest highway - adequate	153.4	99.5	70.6	--	--	323.5
Forest highway - inadequate	1,001.7	--	398.7	2.0	--	1,402.4
Forest highway - nonexisting	39.0	--	18.4	--	--	57.4
Forest development roads - bituminous or conrete surface	114.7	48.4	19.5	--	--	182.6
Forest development roads - soil or aggregate surface	807.6	26.9	505.4	25.1	--	1,365.0
Forest development roads - graded and drained	5,905.1	1,070.3	5,862.6	41.2	--	12,879.2
Forest development roads - primitive	4,318.8	359.6	716.7	--	--	5,395.1
Forest development roads - nonexisting	59,870.3	5,661.2	22,635.5	108.0	--	88,275.0
Landing fields, number existing	14.0	2.0	9.0	--	--	25.0
Bridges, number existing (roads)	998.0	109.0	563.0	--	--	1,670.0
Bridges, number existing (trails)	168.0	3.0	143.0	--	--	314.0
Trails, miles existing	16,171.8	1,090.2	8,545.3	--	--	25,807.43
Telephone lines, miles - metallic	623.0	12.0	267.0	--	--	902.0
Telephone lines, miles - ground	1,450.0	--	1,133.0	4.0	--	2,587.0
Total	2,073.0	12.0	1,400.0	4.0	--	3,489.0
Radio - forest covered	10.0	1.0	5.0	--	--	16.0
Radio - fixed stations, number	222.0	15.0	154.0	3.0	--	394.0
Aerial photographs and maps, national forests and adjacent (70,524 square miles mapping area including National Grasslands)						
Photography completed	49,583.0	6,468.0	8,832.0	625.0	--	65,508.0
Resource photography needed (annual)	4,000.0	250.0	1,750.0	65.0	400.0	6,465.0
Planimetric maps completed (class C)	33,510.0	3,050.0	9,000.0	1,400.0	--	46,424.0
Planimetric maps in progress (class C)	4,400.0	1,600.0	4,000.0	--	--	10,900.0
Planimetric maps needed (class C)	6,600.0	--	200.0	--	6,400.0	13,200.0
Topography maps completed (FS and GS)	14,240.0	1,850.0	3,089.0	--	--	18,139.0
Topography maps in progress (FS)	--	--	1,200.0	--	--	1,200.0
Topography maps needed	25,000.0	1,200.0	9,000.0	600.0	3,000.0	38,800.0

FIRE CONTROL, CALENDAR YEARS 1956 THROUGH 1960

FIRE STATISTICS - AVERAGE ANNUAL FOR 5-YEAR PERIOD

Number of fires	Montana	Northeast Washington	North Idaho	Northwest South Dakota	Western North Dakota	Region
Class A, spot to 1/4 acre	474	41	346	.6	.0	861.6
Class B, 1/4 to 10 acres	160	11	63	.8	.4	235.2
Class C, 10 to 100 acres	20	1.6	7	.4	1.6	30.6
Class D, 100 to 300 acres	4.4	.2	2.2	.0	.2	7.0
Class E, over 300 acres	1.8	.0	1.2	.0	.2	3.2

Area burned	Total	Man-caused	Total	Man-caused	Total	Man-caused	Total	Man-caused	Total	Man-caused	Total	Man-caused
National forest	2,930	1,039	117	110	2,114	414	3	0	77	31	5,241	1,594
Private land protected by Forest Service	954	688	26	23	453	380	14	0	20	20	1,467	1,111
Total	3,884	1,727	143	133	2,567	794	17	0	97	51	6,707	2,705

Causes	Number fires	Acres burned	Number fires	Acres burned	Number fires	Acres burned	Number fires	Acres burned	Number fires	Acres burned	Number fires	Acres burned
Railroad	17	469	.0	.0	1	15	.0	.0	.0	.0	18.4	484
Lumbering	10	37	1.4	29	8	46	.0	.0	.0	.0	19.6	112
Campers	42	330	4.6	49	13	32	.0	.0	.4	7	60.4	418
Smokers	53	359	4.8	6	22	159	.0	.0	.0	.0	80.4	524
Debris burning	30	293	2.0	30	10	229	.0	.0	.0	.0	42.4	552
Incendiary	.0	.0	.0	.0	.2	11	.0	.0	.0	.0	.2	11
Miscellaneous	37	240	3.0	18	12	301	.4	.0	.6	44	49.4	603
Total man-caused	187	1,727	15.8	133	67.6	794	.6	.0	1.0	51	270.8	2,705
Lightning caused	474	2,156	37.8	10	352	1,773	1.4	17	1.0	46	864.8	4,002
Total	660.6	3,884	53.6	143	419.6	2,567	1.8	17	2.0	97	1,135.6	6,707

FIRE CONTROL, CALENDAR YEARS 1956 THROUGH 1960--Continued

FIRE STATISTICS - AVERAGE ANNUAL FOR 5-YEAR PERIOD

Number	Montana	Northeast Washington	North Idaho	Northwest South Dakota	Western North Dakota	Region
Lookout towers	116	12	96	1	0	225
Fireguards	237	31	294	2	0	564
Crewmen	896	31	1,057	0	0	1,984
Pack mules and horses	*581	26	281	2	0	890
Government-owned airplanes	**2					2
Aircraft under contract	32	2	13	0	0	47
Landing fields	12	2	8	0	0	22
Smokejumpers	**150					150
Fire jumps made 3-year average	295	0	333	0	0	628

*30 head based in Montana but used throughout Region 1
**Based in Montana but used throughout Region 1.

Treatment of Slash on National Forest Sales - Average Annual For 5-Year Period

Acres treated	68,601
Fiscal year Section 6 of G-T Act collections	1,520,117
Purchaser participation	159,261

FISCAL CONTROL, FISCAL YEAR 1960

EXPENDITURE AND RECEIPT STATEMENT

Operating expenditures	Appropriated funds	Expenditures from deposits by cooperators	Total	Collections (receipts) deposited in U.S. Treasury
Timber use	$4,011,164.55	$548,558.80	$4,559,723.35	$9,959,676.63
Tree insect and rodent control	246,599.02		246.599.02	
Tree disease control	1,229,982.55	84,947.15	1,314,929.70	
Other use	528,396.24	2,079.41	530,475.65	428,582.07
Land exchange and acquisition expense	64,266.80		64,266.80	
General surveys, maps, and boundary posting	178,274.37		178,274.37	
Other land use	127,070.96		127,070.96	21,020.74
Recreation use	549,274.99		549,274.99	44,617.11
Wildlife use	104,221.99		104,221.99	
Water use	63,996.87		63,996.87	10,309.49
Soil surveys	32,316.78		32,316.78	
Fire prevention and presuppression	1,956,580.30	203,481.16	2,160,061.46	
Fire research	156,757.78		156,757.78	
Fire suppression	1,120,701.07	19,042.44	1,139,743.51	
Maintenance of improvements	951,211.47	55,614.88	1,006,826.35	
Maintenance of roads	845,027.07	47,172.16	892,199.23	
Maintenance of trails	529,122.33		529,122.33	
Total	$12,694,965.14	$960,896.00	$13,655,861.14	$10,464,206.04

Total investment expenditures (capital investment)	$6,934,272.82
Total work performed for others (reimbursable)	233,134.84
Total work performed for others (not reimbursable) (Approximately $40,000 on Yellowstone earthquake area and estimated $49,000 collected for fire suppression on private land and deposited to Miscellaneous Receipts)	89,071.60
	89,071.60
Total state and private forestry (cooperative fire control, tree disease control, etc.)	457,054.31
Total survey and technical directions, tree pests	198,534.37
Total submarginal land projects (nonnational forests)	115,277.42

FISCAL CONTROL, FISCAL YEAR 1960--CONTINUED

RECEIPTS AND RESERVE FUNDS

RECEIPTS	TIMBER SALES	GRAZING	LAND USE	RECREATION	POWER	MINERALS	TOTAL
FISCAL YEAR, 1959	$6,553,734.01	$445,863.45	$64,693.40	*	$9,903.05	$11,233.62	$7,085,427.53
FISCAL YEAR, 1960	9,959,676.63	428,582.07	20,718.19	$44,617.11	10,309.49	302.55	10,464,206.04

	MONTANA	WESTERN NORTH DAKOTA	NORTHWEST WASHINGTON	NORTHWEST SOUTH DAKOTA	REGION TOTAL
25% FOREST RESERVE FUND					
FISCAL YEAR, 1959	$887,463.84	$765,477.16	$116,220.71	$2,195.17	$1,771,356.88
FISCAL YEAR, 1960	1,291,823.87	1,076,350.83	245,567.25	2,309.55	2,616,051.50
10% FOREST RESERVE FUND - RECEIPTS USED FOR ROADS AND TRAILS					
FISCAL YEAR, 1959	354,985.54	306,190.86	46,488.28	878.07	708,542.75
FISCAL YEAR, 1960	516,729.55	430,540.33	98,226.90	923.82	1,046,420.60

*RECREATION FOR 1959 IS INCLUDED IN LAND USE FIGURE.

1. BY LAW, 25 PERCENT OF THE ANNUAL GROSS RECEIPTS OF THE NATIONAL FORESTS IS RETURNED THROUGH THE STATES TO THE ROAD AND SCHOOL FUNDS OF THE COUNTIES IN WHICH THE NATIONAL FORESTS ARE LOCATED.

2. TEN PERCENT OF THE NATIONAL FOREST RECEIPTS IS MADE AVAILABLE EACH YEAR FOR THE CONSTRUCTION AND MAINTENANCE OF FOREST SERVICE ROADS AND TRAILS.

RESEARCH

The Intermountain Forest and Range Experiment Station, with headquarters at Ogden, Utah, is one of nine experiment stations operated by the U.S. Forest Service. Its primary function is to find answers to management problems on the forest and grass-covered watershed lands of the Intermountain and Northern Regions.

The research program of this station includes studies in the management of timberlands, in grazing management of rangelands, in the management and protection of watershed lands, forest and range economics, and in products utilization. The program also includes investigations on forest insects, diseases, and fires and a survey of the timber resources of the two regions. The survey activities and the economics studies are conducted in the headquarters office, whereas most of the experimental studies in forest, range, and watershed management are carried out on study areas in the field. Special laboratories for forest insect investigations and forest fire research are maintained at Missoula, Montana. Each year the results of the research findings are summarized in an annual report. The results of individual studies are also reported in a series of Station Research Papers, in various technical journals, and in publications of the U.S. Department of Agriculture. Inquiries about the research program should be addressed to: Director, Intermountain Forest and Range Experiment Station, Forest Service Building, Ogden, Utah.

Research centers and laboratories of the Intermountain Forest and Range Experiment Station in the Northern Region	National forest	Forest type	Acreage
Missoula Research Center, Missoula			
Experimental forests - Coram	Flathead	Larch--Douglas fir	7,460
Experimental ranges - Vigilante	Beaverhead		8,500
Inland Empire Research Center, Spokane			
Experimental forests - Deception Creek	Coeur d'Alene	White pine	3,500
Priest River	Kaniksu	White pine	6,400
Northern Idaho Forest Genetics Center, Moscow-just			
Forest Fire Laboratory, Missoula			
Forest Insect Laboratory, Missoula			
Bozeman Research Center, Bozeman			
Experimental forest - Bernice (inactive)	Deerlodge	Lodgepole pine	2,900

NATIONAL GRASSLANDS, CALENDAR YEAR 1960

AREA STATISTICS

	Western North Dakota*	Northwest South Dakota*	Region
Number projects	2	2	4
Number field offices	3	1	4
Acres	1,033,221	158,730	
Other** (Federal, state, private)	2,026,840	339,408	
Gross acreage - project areas	3,059,775	498,140	

Attached to Custer Forest

Project	Symbol	Headquarters			
Western North Dakota	ND-LU-24	Dickinson, North Dakota	1,026,504		
Cedar	ND-LU-24	Lemmon, South Dakota	6,717		
Little Moreau	SD-LU-4	Lemmon, South Dakota		3,304	
Perkins Corson	SD-LU-21	Lemmon, South Dakota		155,426	
			1,033,221	158,730	1,191,951

*Although not officially within Region 1, the National Grasslands in western North Dakota and Northwestern South Dakota are attached for administration because of their proximity and management similar to projects in Montana.
**Although "other" lands bulk large in most National Grassland areas, the use and management of these lands has an important influence on areas as a whole.

NATIONAL GRASSLANDS, CALENDAR YEAR 1960--Continued

RECREATION AND LANDS - SPECIAL USE PERMITS, JUNE 30, 1959

	Region				
	Western North Dakota	Northwest South Dakota	Number permits	Acres	Miles
Agriculture and cultivation	28	1	29	1,678	-
Dams and weirs	16	-	16	3	1
Fences (other than drift)	68	9	77	170	81
Miscellaneous	58	10	68	343	470
Total	170	20	190	2,194	552
Department of Interior					
Oil and gas leases - acquired	670	119	789	1,015,769	-

RANGE & WILDLIFE MANAGEMENT

Range Management, 1960			Western North Dakota	Northwest South Dakota	Region total
Range open to livestock, acres			1,032,904	155,415	1,188,319
Cattle, permitted, number			42,629	8,736	51,365
Paid permits, number			541	131	672
Sheep, permitted, number			1,700	4,845	6,545
Paid permits, number			10	11	21
Total paid permits, number			551	142	693
Wildlife Management, 1960					
Fish streams, miles			86	4	90
Fish lakes, acres			17	5,730	5,747
Range open to game, acres			2,006,700	650,000	2,656,700
Range, game only, acres			200	0	200
Big game:	Mule deer	Harvest	4,510	260	4,770
	White-tailed deer	Harvest	1,210	340	1,550
	Antelope	Harvest	1,710	500	2,210
	Elk	Harvest	0	0	0
	Moose	Harvest	0	0	0
	Bear, grizzly	Harvest	0	0	0
	Bear, black	Harvest	0	0	0
	Mountain goat	Harvest	0	0	0
	Mountain sheep	Harvest	0	0	0
Big game hunters, visits			6,000	3,450	9,450
Small game and bird hunters, visits			7,600	5,800	13,400
Fishermen, visits			3,000	33,000	36,000

Note: Population estimates for big game discontinued.